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POST-MORTEM TECHNIQUE IN THE EQUINE SUBJECT*

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The execution of what may be termed the "perfect *post-mortem* examination" demands the combined knowledge and skill of the anatomist, the pathologist, the surgeon and the clinician: not only all this but, in addition, it calls for the facilities of the dissecting-room and, above all, the expenditure of unlimited time. The average practitioner, even though he be possessed in high degree of all the scientific attributes mentioned, generally finds himself hampered both by the lack of facilities and of time, and has to content himself with gaining the maximum amount of evidence in the minimum amount of time. The conditions under which he has to carry out his examination in the typical knacker's yard, the usual lack of skilled assistance and the hurry which his busy life necessitates are not conductive to the performance of perfect examinations. Nevertheless, he can, by ignoring the obstacles (or rather, by surmounting them) and making the very most of the facilities and time available, gather from his examination the information which every case and every particular set of circumstances require.

The object of this address and demonstration is to open a discussion on the subject of *post-mortem* examination in the carcass of the horse under the conditions met with every day by the busy practitioner, *i.e.*, under essentially "field conditions," either at the knacker's yard or at the farm itself. One will not suggest, therefore, the use of any facilities, apparatus or instruments, or of any methods which are not available to or practicable for every practitioner, whether he be favourably situated in close proximity to some up-to-date yard or in some isolated country district where the destination of his subject is the local "kennels."

Wherever possible, *post-mortem* examinations are best carried out at a knacker's yard in preference to farm premises. At a yard one has better facilities in the way of assistance in skinning and dismembering the animal, and its subsequent disposal is more easily effected. There are, however, numerous occasions when the *post-mortem* examination has to be carried out on the farm itself, and one must be prepared to do the whole of the work oneself without the aid of the knacker.

Whatever the conditions under which a *post-mortem* examination is carried out, it is essential, if the best results are to be obtained, for the work to follow some definite sequence, and one ventures to suggest the following chronological system for the consideration and execution of *post-mortem* examinations in general.

In the first place, one must consider the reasons for which the examination is being made and the amount of information required therefrom. The objects may be summarised:—

(1) In order to confirm or refute a diagnosis made during life.

The ideal procedure for all practitioners and all who carry out the treatment of animals is to check their diagnoses, in all cases that terminate fatally, by careful *post-mortem* examination. By this means more than in any other way is sound knowledge gained and diagnostic skill strengthened. Available time, however, is generally the deciding factor on these occasions and, desirable as routine *post-mortem* examinations may be, they cannot in every case be carried out. In all cases, however, where a sworn opinion of the cause of death or the extent of the existing pathological condition is required, either in the form of a certificate to be handed to an owner or an insurance company interested in the animal, or as written or verbal evidence for presentation in a court of law, a careful and adequate *post-mortem* examination is imperative.

(2) In order to complete and extend a definite and indisputable diagnosis made during life.

Even though an accurate diagnosis has been made during life, it is very often necessary to complete or extend the diagnosis by *post-mortem* examination. An animal may be involved in an accident, suffering, among other injuries, a broken leg, on account of which injury it is destroyed. One cannot, however, let the case rest there; one must ascertain the exact nature of the fracture, and prepare and retain the damaged bone or bones as evidence in possible legal proceedings. Not only so, but one must ascertain the number and extent of other injuries resulting from the accident and their value as an aid to the mental-reconstruction of the accident itself and to the estimation of the amount of violence to which the animal was at the time subjected.

Furthermore, different diseases or conditions

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may, and frequently do, co-exist in the one animal, and even in accurately diagnosed cases it may be of material importance from a legal point of view to have definite knowledge of the presence or absence of other co-existent conditions in any particular animal, whether such conditions have contributed to the cause of death or not. For instance, in the case of the horse destroyed on account of a fractured leg, one may subsequently be asked by a cross-examining counsel in a court of law a question such as this: " Was the horse in a state of perfect health at the time of the accident, or was he affected with some condition which might have reduced his value or his length of life and so reduced the amount reasonably claimable by a plaintiff?" At this point, evidence showing the results of a thorough *post-mortem* examination would be of the greatest value not only to the court but to the reputation of the veterinary surgeon concerned.

(3) In order to establish a diagnosis, which during life was impossible.

In a proportion of cases met with it is not possible to establish a certain diagnosis during life, either because death has been so rapid or because the symptoms have been so indefinite or the lesions so deep-seated as to defy complete and thorough examination in the living subject. A horse may fall in the street and expire within a few minutes; he may die within an hour or less of the onset of abdominal pain; or he may show persistent lameness resulting from the erosion of an articular surface of a limb-bone. In cases such as these, nothing short of a thorough *post-mortem* examination can establish a justified diagnosis.

(4) In order to establish the cause of death in cases which have not been examined by us during life.

The establishment of the cause of death in these cases presents the greatest of all difficulties associated with *post-mortem* examinations. The evidence which we are able to gather from attendants is usually so scanty and vague that we have to rely on our *post-mortem* findings even more than in the preceding instances.

Having negatived the presence of anthrax, we have to make a thorough and detailed examination of every part of the carcass which might under any circumstances give a clue to the cause of death: not only so, but we must note any departure from normal in any organ or part of the carcass, even though the obviously responsible fatal lesion be discovered in one particular organ or system. This type of case demands a complete and thorough examination of the whole carcass.

From the above remarks, it will be seen that *post-mortem* examinations fall into at least two classes: Specific and General.

In the specific *post-mortem* examination, we seek primarily for lesions in one or more particular organs, body-cavities or limbs, at the same time making a general but somewhat superficial survey of the rest of the carcass, *i.e.*, we look for " everything of something and something of everything "—a critical examination of some particular part or parts together with a more superficial examination of the rest of the animal as a whole.

In the general *post-mortem* examination we approach the examination of the carcass without previous evidence to attract our attention to any particular region, and we look for "everything of everything "—an exhaustion of every possible clue to both the exciting and contributory causes of death.

In cases confidently diagnosed before death, and in those cases where the *seat* of the lesion if not also its nature, is determined upon, a specific *post-mortem* examination confined primarily to the seat of the trouble generally suffices for all normal requirements, *e.g.*, in the case of a mare which has suffered from an obvious acute septic metritis, the *post-mortem* examination would be confined at most to the abdominal and chest cavities and their contents and the hooves (peritonitis, secondary septic pneumonia, laminitis, etc.) and no time need be spent on a detailed examination of the head or limbs, etc.

Similarly, in a case of septic tendo-vaginitis, the *post-mortem* examination would be confined chiefly to the affected leg and chest cavity in particular and little time need be spent in examining the other legs.

In cases where diagnosis during life has been impossible, but where the horse has been found to be sound in the use of his limbs, the head and trunk and their cavities and contents will call for attention, to the exclusion of the limbs.

For purposes of our demonstration we must consider the complete *post-mortem* examination, and so cover the whole field of work appropriate to every occasion, leaving the question of the limitation of the examination, as to that of a specific search, to be decided upon by the practitioner engaged on each particular case with special reference to the circumstances presented to him on each occasion.

We will consider the case where a horse has been found dead in the stall or field, and on which we are requested to make a *post-mortem* examination and furnish a certificate of our opinion as to the cause of death.

PROCEDURE SEQUENCE

The sequence of our investigation and examination may be set out thus:—

We first note the name and address of the owner of the animal and the person requesting the *post-mortem* examination, the reasons given by them and any remarks passed which may

subsequently help us in linking together the chain of evidence we hope to find.

It is advisable, if one is acting for an insurance company or any party other than the owner of the animal, to make clear to the owner that he may be present at the examination and/or be represented by his own veterinary surgeon, and, if he desires to take advantage of the right, to give him and/or his veterinary surgeon ample notice of the time and place where the examination is to take place. If acting for an owner in the case of an insured animal, one must notify the insurance company and give them also the opportunity of being represented at the examination. If these precautions are omitted, one lays both oneself and one's client open to severe criticism in a court of law, and vitiates any claim which one's client may legitimately hold in respect of the animal in question.

INSTRUMENTS REQUIRED.

The instruments used for *post-mortem* examinations need not be elaborate in numbers or pattern, and among the instruments to be found in even the most modest and " homely " surgery will be found all that are necessary for the completion of an adequate *post-mortem* examination.

The essential instruments are:—

A strong knife with a 6 in. by 1 in. blade, gently curved and with a fairly broad point.

A large dissecting scalpel and pair of forceps.

A strong pair of scissors for cutting tissues and opening the stomach, bowels, etc. Special bowel-scissors are an advantage, but are not essential.

A strong " back-saw," similar to those used by butchers in sawing down the back of a bullock. This is necessary for sawing through ribs, head and spine.

A large curved needle threaded with fine string. This is used in ligaturing the bowels, large vessels, etc.

A 10 c.c. " Record " syringe with three or four large hypodermic needles. This is used in drawing off samples of blood, urine, cerebro-spinal fluid, pericardial fluid, etc.
(The syringe and needles are, of course, sterilised before being put to these several uses.).

Several glass jars (sterile) for holding portions of organs, etc., removed for further sectional or bacteriological examination.

Several bottles for holding samples of fæces and stomach and bowel contents for future examination for worms, poisons, etc.

Several sterilised tubes for holding body-fluids for chemical, bacteriological or bio-chemical examination.

Sterile swabs in tubes for taking samples of pus, etc., for cultural examination.

Microscopic slides for smears from organs or fluids.

Measuring glass for measuring volumes of fluids such as pericardial fluid, urine, etc., and a measuring ruler or tape for measuring the length and breadth of cuts, scars or internal ruptures.

If the operator fears infection through cuts, etc., on the hands, the wearing of rubber gloves is advisable.

RECORDING OF DETAILS AS THE EXAMINATION PROGRESSES.

A complete record should be made of the date and time of the examination, the weather conditions and the names of the owner and witnesses. Notes of the history of the case and of every detail of the *post-mortem* examination should be made and retained for purposes of a general " summing-up " of the case at the end of the examination.

HISTORY OF THE CASE.

On arrival at the premises where the carcass lies, one makes full inquiries as to the history of the case: How long is it since the horse was last seen alive? Was it a case of sudden and unexpected death, or did the horse show signs of illness prior to death? If illness occurred, what were the symptoms shown, how long did they last, were they continuous or intermittent? Where has the horse grazed and what fodder has he received during the preceding weeks? What is the past history of the horse since coming into the present owner's possession? If he is not a home-bred animal, what can be gathered of his early history? One must, in short, attempt to gather as much information as possible regarding the horse and the circumstances attending his death, so that, while not necessarily attaching too much importance to this " unskilled " evidence, one may bear the facts in mind during the subsequent examination.

EXAMINATION OF THE SURROUNDINGS.

It is important to make a general examination of stable, box or field in which the horse has lived his last hours and has died, and of the pasture on which he has recently grazed, and the fodder which has been supplied to him. The condition of the stall, walls and floors may point to a violent struggle having taken place before death, and so prompt us to look especially for lesions responsible for acute pain, *e.g.*, twists of the bowel, meningitis, rupture of the stomach, verminous mesenteric aneurism, etc. Such signs of a struggle will also remind us to expect to find considerable bruising of the carcass and

perhaps even fractures of certain bones (coxal tuber, nasal bones), and save us from the error of attaching other interpretations to these fractures.

Examination of the pasture may show similar signs of a mortal struggle, if death has taken place there: proximity of certain trees, especially if scored by lightning, together with meteorological evidence of lightning in the vicinity at the material time will suggest a search for *post-mortem* evidence of lightning stroke, as also will the proximity of the carcass to wire fencing or other lightning-attractors: the presence of recognisable poisonous plants and weeds will suggest plant-poisoning: the presence of blood or hairs on railings, etc., on which the horse may have been impaled, and the presence of pools or trails of blood, will guide one to look for signs of mortal hæmorrhage in the carcass.

EXTERNAL EXAMINATION OF THE CARCASS.

Before proceeding to the examination of the carcass itself, one must decide whether the history and circumstances or the external appearance suggest in any way the possible presence of anthrax. If anthrax is suspected, smears from the submaxillary fluids and blood should be examined and, if positive, the carcass is then dealt with as directed by the Anthrax Order.

Having negatived the presence of anthrax, one proceeds firstly with the external examination of the carcass.

The full identification of the horse is noted down: breed, sex, age, colouring and markings, together with any outstanding and distinguishing features. Note the position in which the carcass was found, the side upon which it lay (this helps in the interpretation of hypostatic collections of blood in the carcass): its position in relation to fixed objects, such as fences, posts, trees, gates, doors, etc. Then examine the natural orifices: the nostrils for discharges—purulent (nasal catarrh, empyema, strangles, etc.); bloody (pneumonia, concussion of brain, rupture of pulmonary vessels, etc.); or mixed with stomach-contents (impaction or rupture of stomach); and patechiæ (purpura).

The mouth is examined for blanching of inside of lips (internal hæmorrhage), bruises and œdema (from violent struggling and injury), congestion and swollen tongue (strangulation).

The anus is practically always swollen and the rectum is partially everted in all cases shortly after death, due to the abdominal tympany and pressure. The anus and visible portion of rectum may show laceration and inflammation (cases of sadism and abuse). The sheath is examined for paraphymosis, adhesions, etc. In the mare the vagina may show purulent or sanious discharge (metritis and vaginitis), lacerations resulting from recent or previous parturitions or from sadism.

From an examination of the natural orifices also, together with the eye, some estimate may be formed as to the length of time which has elapsed since death took place. At death, and for several hours afterwards, the eyelids are rigid and the green-blue fundus (tapetum) of the eye is reflected through the cornea. After 12-24 hours (earlier in hot weather and later in extremely cold weather), the cornea becomes cloudy and dull, the intra-ocular pressure is reduced and the eyeball shrinks, the lids become flaccid and, as a result of the sinking of the eyeball, the orbit appears more prominent. The mucous membrane of the mouth becomes dry and lustreless, the nostrils show an oozing of sanious froth and mucus from the lungs and nasal passages, and the rectum takes on a livid and dirty appearance, resulting from the disintegration of blood in the constricted vessels.

The skin of the animal should now be examined prior to removal. One looks for signs of mange, eczema, wounds, scars, burns (including, in certain cases, lightning-burns): evidence of the application of blisters and of firing of the limbs and neurectomy scars; sores on the back, ulcers (including ulcerative lymphangitis, farcy, etc.); fistulæ of the withers and poll, quittors around the coronets and quarters of the hoof; symbiotic mange; and any subcutaneous extravasations visible on the surface (urticaria, purpura).

The carcass is turned over on to the opposite side and the examination repeated on that side.

The next step is to skin the carcass completely in order both to facilitate the examination and to preserve the marketability of the hide.

INTERNAL EXAMINATION OF THE CARCASS.

One now commences the internal examination of the horse. In order not to miss any necessary details, it is best to begin with the head and work backwards, examining each area and its organs completely before passing on to the next section of the examination. The carcass is placed on its right (off) side, as from that position the work is more convenient for the (usually) right-handed operator (some prefer to have the carcass lying on its near side).

THE HEAD.

The head is removed from the body at the atlanto-occipital joint. Before actually cutting through the joint and spinal cord, a specimen of cerebro-spinal fluid may be withdrawn by means of the syringe and hypodermic needle. The severed head is laid on a bench and the interior of the mouth and pharynx exposed, showing the contents *in situ*. For this purpose, the cheek

muscles are removed with a knife and the left ramus of the mandible removed by sawing through it at two points (through the intra-alveolar space and slightly below the temporo-mandibular joint) and detaching the medial masticatory muscles.

After examining the tongue, palates, pharynx, larynx, opening of the œsophagus, etc., *in situ*, one completes the removal of the lower jaw by a transverse incision sawn through the right ramus near the opposite temporo-mandibular joint (it is more convenient to saw through the rami in this way than to dis-articulate the jaw). The tongue is then separated and examined on the surface and by linear incisions into its substance (glossitis, etc.). The larynx is slit open and examined (ulceration), the lower teeth are examined (shear-teeth, split molars, gingivitis, etc.). The teeth of the upper jaw are similarly examined.

Before " dismembering " the upper jaw, face and cranium, the brain should be exposed and examined.

In exposing the brain, the cranium is sawn through transversely on a plane slightly behind the posterior margins of the orbits, and two saw-incisions are made from the ends of this incision, one on each side of the cranium and converging slightly to end in the foramen magnum. The separated dome is then raised and the brain exposed and removed. The brain is then split into halves and the interior further examined by transverse incision through its substance (cysts, abscesses, phrenitis). Portions may at this stage be transferred to jars for sectional examination at a laboratory.

The upper part of the skull is now split longitudinally. The interior of the maxillary and frontal sinuses is exposed by sawing through the facial bones transversely along a line drawn from centre of the forehead (in line with the centre of the orbits) and a point about two inches posterior to the facial tuberosity.

When the maxillary sinus is examined (empyema, split molars), the bony septum dividing the anterior and posterior compartments of the sinus is seen and is broken through in order to expose the interior of the anterior compartment.

The nasal septum is now removed and the turbinated bones and nasal passages examined (ulcers, fractures, catarrh). The eyes are removed, the cornea examined for opacities, injuries, etc., and the eyeballs are opened by incisions through their " equators," at right-angles to the axis of the optic nerve. The lens especially is examined (cataract) and, if considered necessary, the rest of the optic mechanism may be placed in a jar and taken away for minute dissection and examination at a later date.

THE NECK.

An incision is made along the length of the jugular furrow down to the trachea and œsophagus. The vagus and sympathetic nerves running alongside these structures are exposed. The interiors of the trachea and œsophagus are exposed by linear incisions along the length of these structures. Here one looks for tracheitis, ulcers, hæmorrhages and, in the case of the œsophagus, for diverticula, stenoses, ruptures, impactions, etc.

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The upper fore-leg is now removed as close to the chest as possible.

THE THORAX.

In order to view the contents of the chest-cavity *in situ*, one removes the upper chest-wall. This is done by sawing through all except the last sternal ribs close to their junction with the sternum and the dorsal vertebræ. The last sternal rib is left intact, together with the asternal ribs, as a support to the diaphragm until one comes to the opening of the abdomen.

The lungs, heart and mediastinum are then removed. In doing this one ligatures and severs the œsophagus close to the diaphragm, severs the aorta close to the base of the heart, and detaches the heart and lungs, by blunt-dissection and the knife, from their membranous attachments to the sternum and roof of the thorax respectively.

The pericardial fluid, if excessive, is drained and measured and samples collected for bacteriological examination where considered necessary. The sac is then opened longitudinally with scissors and the heart laid bare.

The heart and lungs are then placed on a bench and separated. The right and left auricles and ventricles are opened by longitudinal incisions at each side of the coronary vessels, the myocardium, endocardium, valves, etc., are thus exposed and examined (myocarditis, endocarditis, vegetations, etc.).

The bronchial and mediastinal glands are incised and examined (tuberculosis), the bronchi are opened deeply into the substance of the lungs, and the visceral pleura and surface of the lungs are examined (pleurisy, lobular and lobar pneumonia). The presence or absence of nodules in the substance of the lungs is determined by pressure of the palm of the hand along the lungs, and the lobes are further incised by multiple transverse incisions into the substance for examination for abscesses, cysts, pneumonia, glanders, emphysema, etc.

The thoracic aorta is opened and examined for aneurysm, endarteritis, etc., and the surfaces of the parietal pleura, diaphragm, and ribs are inspected (pleurisy, ruptures, fractures).

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The hind leg is now removed by disarticulation at the hip joint.

THE ABDOMEN.

The abdominal wall is opened by an incision from the xiphoid region to the pubis.

A transverse incision is then made through the flank from the umbilicus to the lumbar processes, and the two flaps of abdominal wall are reflected, exposing the interior of the abdomen.

The penis is avoided and left for later examination along with the rest of the uro-genital system.

Before removing the abdominal contents, one looks for accumulations of exudate (peritonitis), adhesions of the peritoneum, displacements of the bowels, etc.

Ligatures are now applied to the small colon as it joins the rectum. The whole of the bowels are then removed from the abdomen by cutting through the peritoneal attachments and ligaturing, and cutting through the anterior mesenteric artery close to the bowel and the duodenum close to the pylorus of the stomach.

The small intestine, cæcum and colon are then separated and examined, first by a careful inspection of the exterior (twists, invaginations, impactions, etc.), and then by slitting them open along their length and examining the contents (parasites, calculi, impactions, etc.). The contents of the bowels are then removed by everting the organs. Samples of the intestinal contents may at this stage be taken and put into jars for future examination for the presence of, and identification of, parasites, chemical and organic poisons, etc. The mesenteric lymph glands are incised and examined for tuberculosis. The lumen of the different sections of the bowels is then made more readily visible by washing in cold water, after which one examines for evidence of inflammation, ulcers, necrosis, and diverticula.

The severed anterior mesenteric artery may now be examined specially for signs of verminous aneurysm.

The stomach (along with the spleen) is now detached and removed, examined for ruptures, and split open by an incision along the greater curvature. Samples of the contents are taken if necessary (poisonous plants, chemical and organic poisons), and the contents are removed and the mucous membrane washed clear. The membrane is examined for inflammation, signs of catarrh, etc.

The spleen is removed, along with the stomach: its surface is examined for tuberculous nodes, peri-splenitis, etc. The spleen substance is exposed by multiple longitudinal incisions into the substance and examined for tuberculosis, leukæmia, etc.

The liver and diaphragm are now removed together, then separated and examined. The surface of the liver is examined specially for cirrhosis, perihepatitis, necrosis, etc., and the substance is exposed by numerous longitudinal incisions into the substance and examined for abscesses, fatty degeneration and infiltration, necrosis, cirrhosis, parasitic cysts, etc. In cases of suspected poisoning by metallic or by organic poisons, portions of the liver should be removed and placed in glass jars for transmission to the analyst. The separated diaphragm is examined for signs of *ante-mortem* rupture, adhesions resulting from peritonitis, etc.

The kidneys are now exposed *in situ* by stripping away the peri-renal fat and capsule. The surface is examined for infarcts, interstitial nephritis (when present in chronic form this prevents the complete stripping of the capsule) and retention cysts. Before detaching the kidneys, one traces and exposes the ureters through their course from the hilus of the kidneys to the bladder. The ureters are examined for swelling (inflammation, calculi, occlusions), and if appearing distended or abnormal are slit lengthwise and their lumen examined. The kidneys are now removed by blunt dissection and their substance examined by dividing them through their long axis. The substance is examined for nephritis, cysts, calculi, hæmorrhages, etc. In suspected cases of poisoning, portions of kidney should be sent for analysis.

THE PELVIS.

Free access to the pelvis and its contents is gained by sawing through the shaft of the left ilium and the pubic symphysis and cutting through the lateral ligaments of the pelvis. By this means the upper half of the pelvic girdle is removed.

Before opening the bladder a sample of urine may be drawn off by means of the syringe.

The bladder, urethra, penis and associated glands are removed *en masse* and transferred to a bench, where the bladder and urethra are opened along their length and examined for cystitis, calculi, urethritis, strictures, etc., and the accessory glands are exposed and opened and examined for hypertrophy, inflammation, catarrh, and distension due to obstruction of ducts.

In the mare, the ovaries are examined for degeneration, cysts, etc., the Fallopian tubes for obstructions, catarrh of the mucous membrane, etc., and the uterus and vagina are opened and examined for metritis, pyometra, wounds and cicatrices resulting from difficult parturitions, purulent vaginitis, etc.

One has now examined all the important cavities and organs of the body. The pancreas and ductless glands (adrenals, thyroids, parathyroids, pituitary, and thymus) are rarely the seat of morbid changes in the horse, but, if desired, they may be exposed and examined when one is dealing with the other organs in their vicinity, *i.e.*, the pituitary along with the brain, the thyroids and parathyroids along with the trachea, the adrenals along with the kidneys.

the thymus (in young stock) along with the lungs and trachea, while the pancreas may be examined as removed with the stomach or the small intestine.

The legs and hooves remain to be examined. Apart from cases of septic infection of joints, tendon-sheaths or feet, the cause of death is seldom to be found in the limbs of the horse. Furthermore, in these cases death is not sudden and unexpected, and in performing *post-mortem* examination on the subject one's attention is directed chiefly towards some particular region or joint.

The *post-mortem* examination of the limbs consists merely of a dissection of the part one is particularly interested in, and calls for little comment here.

In connection with the hoof, a sagittal section generally suffices to reveal the necessary detail, and further examination of the pedal and navicular bones can be facilitated by dissecting them out from the divided hoof.

One is now left with the examination of the spine and the spinal cord. The spinal column is exposed on its dorsal aspect by cutting away the muscles of the back and neck and is examined particularly for fractures, dislocations, ostitis (especially of the neck bones—tuberculosis, callus-formation, etc.).

The exposure of the whole of the spinal cord *in situ* is a tedious process and is seldom attempted.

Where one particular section of the cord is of interest (in cases of injury to the lumbar region, paralysis of the hind limbs, etc.), it may be exposed by sawing through and removing that region of the spine, and then sawing through and removing the dorsal arches of the vertebræ and so exposing the cord and its membranes. The cord is then removed from its canal and sectioned transversely and its substance examined. Portions of the cord may then be placed in jars and sent for sectional examination.

In special cases where it is desired to view the *whole* cord *in situ* the carcass should be opened and the viscera removed in the same manner as is done by butchers in dressing a bullock, and, with the eviscerated carcass hung up by the hind legs, the spine is split by a competent man, using a sharp cleaver. This method results inevitably in some laceration of the cord but, if carefully done, the resulting injury to the cord is seldom so great as to spoil its examination.

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POST OFFICE REGULATIONS GOVERNING THE TRANSMISSION OF DELETERIOUS LIQUIDS OR SUBSTANCES BY POST

The following are the Post Office regulations which must be complied with by persons sending fluids, tissues, etc., by post for laboratory examination.

Articles sent for Medical Examination or Analysis

Deleterious liquids or substances, though otherwise prohibited from transmission by post, may be sent for medical examination or analysis to a recognised Medical Laboratory or Institute, whether or not belonging to a public health authority, or to a qualified Medical Practitioner or Veterinary Surgeon within the United Kingdom, by *Letter Post, and on no account by Parcel Post,* under the following conditions:—

Any such liquid or substance must be enclosed in a receptacle, hermetically sealed or otherwise securely closed, which receptacle must itself be placed in a strong wooden, leather, or metal case in such a way that it cannot shift about, and with sufficient quantity of some absorbent material (such as saw-dust or cotton wool) so packed about the receptacle as absolutely to prevent any possible leakage from the package in the event of damage to the receptacle. The packet so made up must be conspicuously marked "Fragile with care," and bear the words "Pathological Specimen."

Any packet of the kind found in the parcel post, or found in the letter post not packed and marked as directed, will be at once stopped and destroyed with all its wrappings and enclosures. Further, any person who sends by post a deleterious liquid or substance for medical examination or analysis otherwise than as provided by these regulations is liable to prosecution.

If receptacles are supplied by a Laboratory or Institute, they should be submitted to the Secretary, General Post Office, in order to ascertain whether they are regarded as complying with the regulations.

Whenever possible, one should refrain from adding any preservative or antiseptic substance to specimens sent for laboratory examination. If absolutely necessary, they may be put in weak (1-2 per cent.) formalin, but no substance of any kind must be added to material sent for chemical or bio-chemical analysis or cultural examination.

In the above notes an attempt has been made to cover briefly as much of *post-mortem* technique as is possible within the limits of a single paper of this kind. One has been compelled to omit very many details which arise during the actual performance of the *post-mortem* examination, and I wish to emphasise the fact that my effort is intended solely as a stimulant to a discussion on this wide subject, and not as an attempt to cover in one paper a subject on which volumes have been written, and no doubt will be again.

Such, briefly, are the main steps of the *post-mortem* examination of the horse as practicable under ordinary field conditions.

At the completion of the examination a careful survey is made of the details one has noted in the course of examining each cavity, organ and area. From this survey one decides which lesion or condition is directly responsible for the death and which, if any, are the contributory causes.

If one has maintained an open mind throughout the examination one will now view the abnormalities encountered in their correct order of importance. If one has decided to submit fluids, ingesta or tissues for laboratory analysis or examination one should retain one's notes and reserve an opinion until the results of such analysis, etc., are received.

THE *POST-MORTEM* CERTIFICATE

The form in which one's *post-mortem* certificate is set out is important, and though no universally recognised form of certificate is in general use, one ventures to suggest for your consideration the following draft certificate:—

Certificate of Post-Mortem Examination

I hereby certify that at the request of.....
and in the presence of.....
and/or assisted by.....
I have this day made a *post-mortem* examination of..... (animal breed, sex, colour, markings, etc.) .....
the property of.....

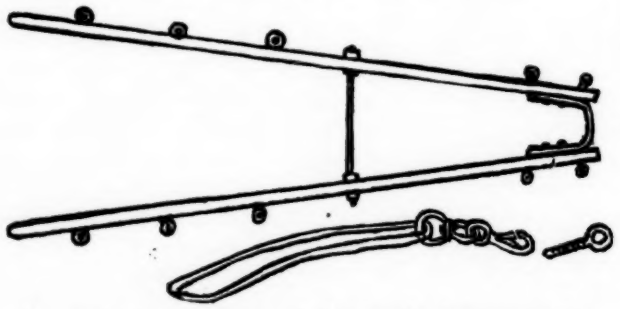
From the information gained by this examination, I am of the opinion that the animal above described was affected with .....
and/or that death was due to.....
(*Signed*).....
Address.....
Date.....

To..... (Person requesting the examination).....

SMALL ANIMAL RESTRAINT

R. H. SMYTHE, M.R.C.V.S.
Camborne

The accompanying sketch illustrates a portable appliance which the writer has found very useful for restraining small animals, away from the surgery, during minor operations.



It consists of two full-length broomsticks, joined at one end by a metal bracket and supported at their centres by a metal rod. A coat of aluminium paint supplies the necessary finish. At suitable intervals, galvanised eyes are screwed into the broomsticks and the patient is fastened, as on an ordinary operating table, by means of cord loops attached to spring hooks. The appliance may be rested on a plain table or between two suitable supports and, if necessary, the patient can be further supported by straps or tapes passing from one stick to the other.

Clinical Communications

DRIED BEET-PULP FOR HORSES

W. E. BLACKWELL, M.R.C.V.S.
Towcester

On February 22nd last I was called to see two horses which were slobbering profusely and unable to swallow. I naturally assumed they were choking and therefore I hurried to their relief.

On my arrival I found them standing together, looking very dejected. Thick frothy mucus was dripping from the nose, and the manger in front of them was saturated with it. They were thirsty and seemed anxious to swallow the water offered them, but, try as they would, their efforts met with no success, and the water simply gushed down the nose again, mixed with the froth. One horse made vigorous attempts to swallow and the resulting paroxysms were pitiful to behold. They had no acute pain and just stood there as if wondering what it was all about. I inquired as to what they had been eating. The owner, replying, mentioning quite casually half-a-gallon of dried beet pulp each per day.

That was quite sufficient for my purpose. I told him at once that the beet pulp was the cause of the trouble, and expressed the opinion that one horse would probably die, and that the fate of the other was doubtful.

The temperatures had risen only slightly at that time. I had learnt from past experience of these cases that the problem of adopting any helpful treatment was a very real one. Only palliatives could be applied: it was useless to attempt any treatment by way of the mouth and hypodermics could do little—the œsophagus and stomach were probably impacted and impassable. Hot packs to the neck and throat were tried, and these seemed to afford some relief. Warm soapy enemata were given.

On the third morning one horse was found dead in the loose-box into which he had been moved. He had remained just the same throughout the attack and had died apparently without a struggle.

The other one was much better. Nearly all discharge from the nose had ceased, and he could now drink water without evincing appreciable pain. It was therefore possible to do something for him, and in another couple of days he was discharged cured, or rather recovered.

I took the opportunity to dissect the skin of the neck aside and examine the structures in that region in the dead animal. This operation revealed the œsophagus to be absolutely impacted with beet-pulp from top to bottom—so

tightly that the lower half of the tube was four times its normal size and resembled the crop of a bird after a feed of grain. The pulp appeared, too, to be quite unmasticated. How hopeless it is, therefore, to attempt any treatment of such a condition.

The jugular vein was full of blood, indicating that death had been brought about by asphyxiation. The froth had passed into the trachea and bronchii from the pharynx.

The lessons to be learned from this case seem to be:—

(1) Do not feed dried beet-pulp to horses unless it has been soaked in water for 24 hours previously. Then feed it in small quantities at first until the horse has acquired both a liking for it and a qualification to digest it without discomfort or injury.

(2) Impaction is the first stage in the cycle of events leading up to a fatal result. This stage is followed by dilatation of the œsophagus, especially the lower half, which might easily be ruptured if any attempt were made to force its contents onward.

(3) Inflammation of the pharynx and œsophagus is evinced.

(4) Paralysis of both organs occurs.

I have seen effects different from these as the result of feeding dried beet-pulp to horses: indigestion, gastro-intestinal stasis, colic and death. The amount of water the pulp will absorb during its immersion is surprising.

* * * * *

EXCEPTIONAL CASE OF FRACTURE OF THE TIBIA IN A HORSE

C. R. A. POWELL, M.R.C.V.S.
Luton

Subject.—A five-year-old Shire gelding.

History.—The horse was in pair at chain harrow on grass. The man in charge said that, as he turned them round at the top of the field the horse on the near side trod on the near coronet of the animal on the off-side. He heard something snap. The horse would not move, and he noticed blood pouring from a wound on the inside of the leg, half-way between the stifle and hock joint.

Diagnosis.—Examination revealed a complete fracture of the tibia, with the end of the bone projecting through the flesh wound.

The Clydesdale Horse Society has had a very successful year, and income exceeded expenditure by £346 10s. 5d. An improvement of industrial conditions is likely to be followed, the report states, by an active demand for horses suitable for street work.

* * * * *

Evans (Alice C.) of the U.S. Public Health Service, has found that a metamorphosis from coccus to bacillus, that is, from a spherical form to a rod form, is a regular part of the life cycle of certain germs.

Abstracts

[The Hospitalisation and Care of Cats. Brown, H. W. *J.A.V.M.A.*, *35* (N.S.), 2. 190-198.]

In this paper, presented at last year's annual meeting of the American Veterinary Medical Association, the author points to the rapid increase in the feline population and the marked improvement in the breeds as factors rendering essential to the veterinarian an extensive and accurate knowledge of the care of cats in health and disease.

With no animal which we are called on to treat does it mean quite so much to be familiar with their habits as in the case of the cat. For instance, the fact that cats, unlike dogs, become attached to places and not to people makes it imperative that we should ascertain from their owners just how they are treated at home and then try to make their life in hospital conform. Any radical change in diet or surroundings may induce a homesickness of such intensity that a fatal persistence in refusal to take food or water may result.

From a valuable dissertation on cat hygiene, special stress being laid on the importance of grooming, the author passes to the consideration of treatment, with due regard to such valuable accessory factors as correct handling and methods of restraint. Typical of the many useful points made is that of the necessity for awaiting the relaxation of the anal sphincter in the cat before completing the insertion of the thermometer.

Five pages of close type are devoted to the ensuing discussion, in which measures of self-defence—nail-trimming, muzzling and the use of "boxing gloves"—figured so largely as to obscure the simple truth that, except in the case of the occasional "tiger," gentleness and a minimum of restraint afford the best guarantee of success in feline practice.

W. B.

* * * * * *

[Grass Tetany. Vety. Dr. Godet. *Recueil de Méd. Vét.* Vol. 108, No. 12.]

Grass tetany in cows has long been known in the Aisne, where it goes under the name of vertigo. It is mostly seen on first turning the cows out to grass. In 1931 it was common among cows in Thierache.

In the first case recorded here, the cow was standing with the fore-legs advanced and the hind legs stretched behind. The head was extended and the neck stiff. There was grinding of the teeth. The slightest touch or sound caused excitement. On trying to get the cow out she turned with difficulty, fell, and had a nervous crisis—banging the head violently on the ground, kicking, and foaming at the mouth. The

XIIM

patient was slaughtered. She bled well, but the meat was very red. There were hæmorrhagic spots on the cerebellum.

Three other cases showing very similar symptoms were met with on this farm in April, 1931. In one case the cow recovered after inflation of the udder, but getting to some barley meal meant for pigs had a relapse and was slaughtered. Another cow exhibiting similar symptoms to the first recovered after udder inflation and subcutaneous injection of calcium gluconate. Altogether, Dr. Godet attended 17 cases in April and May, when they ceased.

Fourteen cases are described; of these, eight were slaughtered, two recovered, and four died.

It was noted that (1) the patients were good milkers; (2) males and pregnant cows and first calvers were exempt; (3) hypothermia was constant; (4) bleeding does harm; (5) morphia, formalin, etc., are useless; (6) inflation and calcium gluconate are efficacious if applied early; (7) rapidity of evolution makes treatment difficult; and (8) the 14 recorded cases were all in empty cows and occurred in April and the early part of May.

W. R. D.

Reviews

[**Partridge Disease and its Causes.** Edited by Major M. Portal, d.s.o., and W. E. Collinge, d.sc., m.sc. Pp. 92. Figs. 22. Price 12s. 6d. Country Life, Ltd., London. 1932.]

This book embodies the Report and Suggestions of the "Country Life Committee of Enquiry into the Diseases of Partridges" during the season 1931-32.

Owing to the heavy losses amongst partridges during the early winter months of 1931, it was decided by *Country Life* to hold an investigation into the cause of the deaths and Dr. Collinge (Keeper to the Yorkshire Museum, York) was appointed pathologist.

The main conclusions of this Committee are:—

(1) "That the partridge disease is due to a small nematode worm *Trichostrongylus tenuis* (Mehlis) which infests the cæca of the intestine and causes irritation and congestion of these organs, in consequence of which they cease to function, and the contents soon become a decomposing mass, producing soluble poisons that are absorbed into the system."

(2) "This investigation seems to indicate that interbreeding, the carrying of large winter stocks, and an insufficiency of food have much to do with the spread of the disease . . . ."

Whilst the investigation showed clearly that the majority of dead partridges harboured many of the above worms (probably in abnormal numbers) it did not carry out any experimental work to prove that:—

(*a*) The worms *were* primarily responsible for the deaths, or for that matter were even pathogenic.

(*b*) "Soluble poisons" existed and were absorbed into the system.

(*c*) Bacterial invasions were negative.

(*d*) There was absent either virus or any other infective factor.

The Committee stressed the probable lack of winter food, and also showed that the food of adult partridges consisted of about 40 per cent. animal food, and 60 per cent. vegetable food, of which about 3·5 per cent. was grain. This surely suggests that food relatively rich in animal protein should be fed to the semi-starving birds instead of boiled maize, grain, biscuit meal, etc.

It is generally recognised that vitamin A is beneficial if given to young animals, especially assisting the vitality of the intestines to resist nematode infestations, yet no mention of this vitamin is made in the Report and no comments are made upon the following paragraph on the "Hand-Rearing of Partridges"—"The food used is as follows: The yolk of fresh hard-boiled egg (no white), some fine biscuit meal (which has a percentage of cod-liver oil added by the makers), scalded with hot water. . . . ."

Finally, there appear to be two small errors:—

(1) "A hot dry season favours coccidiosis." This is not the case with coccidiosis in poultry, since a warm, *damp* atmosphere favours the development of the oöcyst.

(2) "The partridge, in common with other birds, suffers occasionally from enteritis or white diarrhœa, probably due to bacteria. Rettger and Harvey have described such a disease in fowls caused by a bacterium (*Salmonella pullorum*)."

This is incorrect. Rettger and Harvey were writing of B.W.D. in young chicks (not adult fowls), which is a septicæmia. The *Country Life* enquiry did not demonstrate a similar condition in young pheasants, or a localised enteritis in adult pheasants associated with pullorum bacteria.

The real value of the investigation lies in the work of Dr. Collinge concerning the life history of *Trichostrongylus tenuis*.

* * * * *

Animal War Heroes

A very interesting book under the above title has been put on the market, the author being Peter Shaw Baker, and the publishers Messrs. A. and C. Black, Ltd., 4, 5 and 6, Soho Square, London, W.1. Price 5s. net. It is dedicated to his mother, and is the outcome of her meeting "Peggy," the bull-dog mascot of H.M.S. "Iron

Duke." The foreword to the book is by Major-General Sir John Moore, K.C.M.G., C.B., F.R.C.V.S., and Mr. William H. Parr, who served in the Field Artillery of the 1st Canadian Division, contributes a very beautiful poem of a soldier and his two horses who were killed by an exploding shell, and who were buried side by side in the Ypres salient.

Mr. Baker has gone to a lot of trouble in collecting individual histories of his animal heroes, many of them forming the subject of photographs illustrating his book. His mother, who is an artist, has committed them to canvas and her pictures are on view to March 29th at Messrs. Bumpas', 350, Oxford Street, London, W.1. Most of the animal heroes are dogs, and the information has been carefully checked and vouched for by owners. A remarkable instance of a dog finding his master in France is recorded of "Prince," who disappeared from Hammersmith and fetched up with his owner's regiment at the front. The history of "Peggy," of H.M.S. "Iron Duke," is very thrilling, and the value of messenger dogs in war is well depicted. Of horses, the accounts of General Seely's "Warrior," and Lord Middleton's "Raggie" are particularly entrancing. Instances are given of famous war carrier pigeons and a somewhat amusing goose and gander incident as mascots of a Field Artillery Battery. An interesting chapter is devoted to the welfare of animals in war and of the attention paid by Army Veterinary Services in relieving ailment in the Field, aided by the meritorious assistance rendered by the R.S.P.C.A.

At the small cost of 5s. the book is well worth purchase. We can highly recommend it to our readers and their friends.

PREDETERMINATION OF SEX

In a recent interview with a *Sunday Express* representative, Professor E. W. Macbride is recorded as stating that it was now true to say that the problem of sex determination as it affects all the lower forms of life has been solved, and it only remained to concentrate on the problem as it affected human beings and the other higher forms.

It had been found that grasshoppers and bees develop their sex after birth. By varying their food and temperature while still young, their sex could definitely be predetermined.

The sex of a frog had been decided by holding back the egg for two or three days before allowing it to fertilise.

Electric currents have been used in an endeavour to control the sex of the unborn by two Moscow biologists, N. K. Koltzoff and V. N. Schroder. They assert that the female determining life organism has a negative electrical charge, and the male a positive.

By means of electrical apparatus they accurately predetermined sex in rabbits.

"But we are still baffled by the more complex human being," said Professor Macbride, "and no definite advance has been made here."

N.V.M.A. Divisional Reports

VETERINARY MEDICAL ASSOCIATION OF IRELAND*

ANNUAL GENERAL MEETING AT DUBLIN

The annual general meeting of the Veterinary Medical Association of Ireland was held in Wynn's Hotel, Dublin, on Friday, January 27th, 1933, at 8 p.m.

The following members were present:—Messrs. A. A. Donnelly (President), M. J. MacClancy, L. M. Magee, T. A. Mernagh, S. O'Donovan, J. M. Murphy, F. J. Daly, J. E. Fitzgerald, R. R. Pierse, C. Ryan, R. J. Nolan, J. P. Nowlan, H. O'Leary, Professor J. F. Craig, Professor T. G. Browne and Professor J. J. O'Connor (Hon. Secretary).

The minutes of the previous meeting, having been circulated, were taken as read and signed.

Apologies for non-attendance were received from Messrs. T. R. Mulcahy, J. D. Whitty, F. A. Heney, J. V. Carroll, T. McD. Kelly and P. F. Dolan.

Reports

HON. SECRETARY'S REPORT.

The Hon. Secretary's report for the year 1932, which had been circulated, was received, on the motion of Prof. CRAIG, seconded by Mr. MAGEE.

Discussion on Report

The Hon. Secretary read a letter, dated January 25th, 1933, from the Secretary of the Local Government Department *re* the appointment of Veterinary Officer, in the following terms:—

"I am directed by the Minister for Local Government and Public Health to acknowledge the receipt of your letter of December 19th last with regard to the vacant position of Veterinary Inspector under the Diseases of Animals Acts, and I am to state that this question is one which primarily concerns the Department of Agriculture, to whom your communication has been forwarded."

Grievances of the Veterinary Officers of the Department of Agriculture.—It was proposed by Mr. O'DONOVAN, seconded by Mr. MCCLANCY, and passed unanimously, "That the next Council meeting of the Association should consider what further steps should be taken towards the redress of their grievances."

On the motion of Mr. O'DONOVAN, seconded by Mr. DALY, the Hon. Secretary's report was adopted.

HON. TREASURER'S REPORT.

The report of the Hon. Treasurer, which had been circulated, was received, on the motion of Prof. O'CONNOR, seconded by Mr. O'DONOVAN.

Arising out of the report, it was decided that

* Received for publication, February 13th.

the donation to the Veterinary Benevolent Fund be increased to £10 10s., and that an additional £7 7s. be subscribed for last year's subscription.

Prof. Browne drew attention to the great discrepancy between the amount contributed by members of the veterinary profession in the Irish Free State and the amount expended by the Fund in this country.

Prof. O'Connor said that he and Mr. Howard referred to this matter at the last annual general meeting, and that he would support any motion to improve the state of affairs.

It was decided that a special appeal for support of the Benevolent Fund be made to all members of the profession in the I.F.S., accompanied by a statement of the present position of affairs, and that on receipt of the reply measures would be taken to consider the establishment of a Branch of the Fund in the Saorstat.

On the motion of Mr. Murphy, seconded by Prof. Craig, it was decided to ask Prof. Browne what the sale of investments (2½ per cent. Consols, £133 8s. 2d.; 3½ per cent. India Stock, £25 10s.; 5 per cent. I.F.S. National Loan, £200) would realise, and report the result to the next meeting of the Council.

On the motion of Prof. Browne, seconded by Prof. Craig, the report of the Hon. Treasurer for the year ended December 31st, 1932, was adopted.

Report of Council.

The report of Council was read and, on the motion of Mr. Magee, seconded by Mr. O'Leary, it was received.

Discussion on Report

It was proposed by Mr. O'Dea, seconded by Mr. Murphy and passed unanimously that the subscription of £1 1s. be paid to the National Horse Association of Great Britain.

The Royal Sanitary Institute Congress, 1933.—It was decided to ask any members of the Association who would be attending this Congress to represent the Veterinary Medical Association of Ireland.

Conditions Necessary for Certifying a Herd as Tubercle-Free.—The following amended "Conditions Necessary for Certifying a Herd as Tubercle-Free," and the specimen form of certificate and herd book for use in connection therewith, as suggested by the Council, were submitted for consideration.

On the motion of Prof. Craig, seconded by Mr. O'Leary, the revised conditions and the specimen of certificate and herd book as recommended by the Council were adopted.

Veterinary Medical Association of Ireland

TUBERCLE-FREE HERDS

Conditions Necessary for Certifying a Herd as Tubercle-Free

The following are the revised and amended conditions for adoption at the Annual General Meeting of the Association on January 27th, 1933:—

I. (1) All cows in the herd must be tested with tuberculin twice a year and all reactors must be removed immediately.

(2) All new cows joining the herd must have passed the tuberculin test, to the satisfaction of the veterinary surgeon in charge of the herd, immediately before entry.

(3) The proprietor of a tubercle-free herd must not purchase milk (unless it is produced from a herd fulfilling the conditions of a tubercle-free herd) and bring it on the premises where he produces or handles milk from his own herd.

(4) All cows in the herd must be marked for identification purposes, in the presence of a veterinary surgeon, either with a numbered tattoo mark or a metal tab, which cannot be changed from one cow to another.

(5) A herd book must be kept by the veterinary surgeon, in which are entered full particulars of all tuberculin tests carried out on the herd.

(6) The milk must leave the premises either in properly capped bottles or sealed cans.

II. For the present either the double intradermal or subcutaneous tuberculin test be adopted.

III. In practising the subcutaneous tests, at least four temperatures must be taken between the 9th and 18th hours at intervals of three hours, and the temperature be taken by the veterinary surgeon.

IV. Certificates which are given must contain all the necessary particulars.

. . . . . .

The following is the form of certificate recommended:—

"This is to certify that I have tested with tuberculin prepared by.....the herd the property of..... The *.....cows now comprising the entire herd have in my opinion passed either the double intradermal or subcutaneous tuberculin test. The dates of the tests of the *.....cows are as follows:—.....

This is also to certify that I have made a clinical examination of these cows and found in them no evidence of disease likely to contaminate the milk.

Signature.....M.R.C.V.S.

* Insert number of cows.

The following is a specimen page of the herd book recommended. It is intended that one page be reserved for particulars relating to each cow in the herd:—

DESCRIPTION Number.....
PARTICULARS

Date.	Subcutaneous Test.					Double Intradermic Test.			Remarks.
	Initial Temp.	9th hr.	12th hr.	15th hr.	18th hr.	Initial Temp.	48 hrs.	72 hrs.	

On the motion of Prof. O'Connor, seconded by Mr. Murphy, the Report of Council was then adopted.

Election of Officers for 1933

Messrs. Fitzgerald and Pierse were appointed scrutineers of the voting papers. The result of the election of officers was as follows:—

President.—Mr. T. R. Mulcahy.

Hon. Secretary.—Prof. J. J. O'Connor.

Hon. Treasurer.—Prof. T. G. Browne.

Members of Council.—Messrs. F. J. Daly, M. J. MacClancy, H. O'Leary, C. M. Griffin and J. J. O'Brien.

INDUCTION OF PRESIDENT

The Chairman, having declared the above-mentioned officers elected, said: "This, gentlemen, concludes my term of office as President, and first of all I desire to tender my thanks to the officers and members of this Association for the loyal support which they have given to me during my occupancy of the chair.

"The duties of the officers during the past year, while strenuous, yet were not as strenuous as in the previous year, as the Veterinary Surgeons' Bill was then passing through An Dail and consequently required more time and labour from your Council, and in this connection I might especially mention the name of Prof. Craig. (Applause.) During the past year the Council carried out their duties efficiently and with willing heart.

"Thanks to Prof. Browne, who has been such an efficient guardian over our finances, we were able at the beginning of last year to reduce the subscription of one guinea to half that amount. This move was a most agreeable one to all our members, especially in the hard times we are experiencing. (Hear, hear.)

"I had hoped during my term of office to see one undertaking of our Association carried through successfully, and I refer to the existing grievances of the Veterinary Officers of the Department of Agriculture. We did all we could to bring this matter to a successful and satisfactory issue, but we were not able to accomplish our object. We had an interview on the subject with the Minister of Agriculture, Dr. Ryan. I think we owe Mr. Sean O'Donovan our best thanks for the deputation being received so promptly by the Minister. (Applause.)

"We were received very graciously by Dr. Ryan, a charming gentleman, who admitted that the Departmental Veterinary Officers had certain grievances and he promised to look into these matters, but up to the present nothing has been done.

"The previous Minister in office, Mr. Hogan, who I am sure is equally charming as Dr. Ryan, admitted in An Dail that the grievances of the Veterinary Officers should be redressed. He did not redress them.

"I do not wish to introduce politics, but no matter what Government is in power I fear the Veterinary Branch of the Department will not receive justice in relation to pay, promotion, etc. When the Veterinary Officers do move again they will require to take very strong action. They will require to show some of the determination and fighting spirit which imbues our Fresh Meat Inspectors in their struggle.

"I notice the attendance at our meetings last year averaged thirty-two. The average the previous year was thirty. There is no reason why, during the coming year, we should not raise it to forty. It would be only one-eighth of the members registered in the Irish Free State.

Coming to the appointment of our new President, I must congratulate the members on the choice of a successor. You have selected in Mr. Mulcahy a most suitable President and one deserving of the honour of the V.M.A.I. (Applause.) I deeply regret that Mr. Mulcahy is unable to be amongst us to-night. On looking over our new Register, the first Veterinary Register of Saorstat Eireann to be issued, I find Mr. Mulcahy qualified in 1894. It is not my wish to make out Mr. Mulcahy as old, because he is not, but to show you that his career in the profession is of some standing. He is a widely-known practitioner, and very few people in the South of Ireland but know 'Tommy Mulcahy, from the gallant county of Tipperary.' As practitioners form the majority of the profession in the Free State, they will be proud to see one of their number elected to the chair. (Hear, hear.)

"Mr. Mulcahy has taken a deep interest in our Association. I am sure he will fill the position with grace and distinction." (Applause.)

In the unavoidable absence of Mr. Mulcahy, Mr. Murphy (Vice-President) now took the chair, and the following letter from Mr. Mulcahy was read:—

Glenview, Clonmel,
County Tipperary.
January 24th, 1933.

Dear Professor O'Connor,

I am in receipt of yours of the 21st inst.

I find it impossible to find words sufficiently to thank the Council of the V.M.A.I. for the great honour they have conferred on me in electing me President for the coming year.

It is with the greatest regret I have to say that I cannot be with you on Friday night next.

Kindly convey to the meeting my grateful thanks for the honour and, though I feel totally unfit for the high office, yet I accept, in the spirit of loyalty to my profession, and hope to attend the meetings more regularly.

Yours sincerely,
(*Sgd.*) T. R. Mulcahy.

Vote of Thanks for Outgoing Officers.—Mr. Donnelly, the outgoing President, proposed a vote of thanks to the Hon. Secretary and Hon. Treasurer for their good work during the year. In doing so, he said: "In Professor O'Connor we have a most efficient Hon. Secretary, one who

devotes a lot of his time whole-heartedly to the interests of our Association. He is our guiding hand. He makes matters run very smoothly for the President and is ever ready with his sound advice and assistance. (Hear, hear.).

"As regards Professor Browne, I have already mentioned that in his hands the finances of the Association are looked after in the most careful and thorough manner and we owe him and our Hon. Secretary our deep thanks." (Applause.).

Mr. O'Leary proposed a vote of thanks to the outgoing President. This was supported by several speakers and was passed with acclamation.

On the motion of Mr. Donnelly, seconded by Mr. C. Ryan, it was unanimously resolved to send a letter of congratulation to Sir Frederick Hobday, Principal of the London Veterinary College, on the high honour of Knighthood which has recently been conferred on him.

A vote of sympathy was passed to the relatives of the late Thomas Sadlier, m.r.c.v.s., Cashel, Co. Tipperary.

After the meeting Mr. Donnelly entertained the members present to supper, which was very much appreciated and proved a very pleasant social event.

J. J. O'Connor, *Hon. Secretary.*

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SOUTH-EASTERN VETERINARY ASSOCIATION*

MEETING AT MAIDSTONE

A meeting of the South-Eastern Division of the N.V.M.A. was held in the Star Hotel, Maidstone, on November 30th, 1932. There were present:—Mr. H. P. Hogben (President), Major J. I. Edgar, Major G. W. Dunkin, Messrs. A. D. McEwen, S. F. J. Hodgman, J. B. Dier, A. T. Crowther, E. Morgan, J. G. Cattell, J. T. Turney, E. Wemys Morton, C. Roberts, R. V. Isherwood, F. Crowhurst, H. Gooch, L. Hughes, A. Spicer and Major T. Dalling (Hon. Secretary). Mr. J. S. Blair attended as a visitor.

The minutes of the meeting held on March 11th, 1932, and published in the *Veterinary Record* of May 28th, 1932, were taken as read and duly signed by the President.

New Members.—The election of new members who had been duly nominated was carried out. The new members are:—Mr. L. Hughes, m.r.c.v.s., Tunbridge Wells; Mr. J. T. Turney, m.r.c.v.s., Worthing; Mr. R. V. Isherwood, b.a., m.r.c.v.s., Tonbridge; and Mr. A. B. McIntyre, m.r.c.v.s., Beckenham.

Correspondence.—Several items of correspondence were dealt with. Two letters of a private nature received from the Secretary, N.V.M.A., were discussed and replies drafted. A letter dealing with the appointment of a representative to represent the Division on the Committee of the West Sussex and Brighton Branch of the R.S.P.C.A. was read and discussed. It was decided to nominate Mr. G. Bloxsome, Southwick, or (failing his acceptance) Mr. H. Scott Dunn, Hove. (Mr. H. Scott Dunn accepted nomination and is the representative of the Division.) A letter from the Secretary, N.V.M.A., in connection with schemes for treatment of animals of the poor was read and discussed. Members from Canterbury, Tonbridge, Deal, Folkestone, Beckenham and Bromley described the various schemes in operation in their districts. The Hon. Secretary undertook to obtain information in connection with schemes in other districts under the administration of the Division.

Nomination of Office Bearers for 1933.—The following officers were nominated for 1933 (election to take place at the Annual Meeting in March):—*President*: Mr. Arnold Spicer, f.r.c.v.s.; *Vice-Presidents*: Messrs. H. P. Hogben, C. Crowhurst, F. Crowhurst and E. Ebbetts; *Hon. Secretary*: Major T. Dalling; *Council*: Messrs. J. G. Cattell, A. T. Crowther, J. B. Dier, F. C. Gillard, T. F. Hogben, F. Marks, E. Morgan and C. Roberts.

THE ROYAL SANITARY INSTITUTE CONGRESS, 1932

The Hon. Secretary, who was the delegate of the Division, read the following report:—

"The 1932 Congress of the Royal Sanitary Institute was held at Brighton under the Presidency of Lord Leconfield, from July 9th-16th. Your delegate was only able to attend some of the meetings of Section F.—Veterinary Hygiene, which took place on July 14th and 15th.

"The section meetings were well attended, but it was with disappointment that one was able to count fewer than twenty members of the veterinary profession among the audience. Alderman Sir William Phené Neal presided over the section meetings and in his Presidential Address gave proof once more of his continued interest in meat inspection problems and in his strong regard for the services which the veterinary profession are rendering. He made it very clear to his audience that the veterinary profession had accomplished great things in ridding the country of various diseases and insisted that it is the veterinary surgeon's duty to be responsible for the supply of sound meat to the general public. His address, one feels sure, created among those present the feeling that the veterinary profession is something more than a body of men who treat sick animals—namely, that in addition to being responsible for the treatment of sick animals their duties are to keep animals free from disease and by their being employed by municipal bodies, etc., to ensure a safe and sound food and milk supply.

* Received for publication February 8th.

"Major Brennan De Vine, Birmingham, presented a paper on 'The Law relating to Meat Inspection.' He traced the various Acts and Regulations and showed their significance, and ended by pointing out that the time is now ripe for the passing of a special Public Health Act in connection with the food supply of England and Wales and that in the framing of such an act the Public Health Act of Scotland would form a good basis. Mr. W. Jackson Young, Newcastle, opened the discussion, emphasising what had already been said, and pointing out that even more meat and milk inspection was necessary than is practised to-day. Much discussion followed and many tributes were paid to the services rendered by the veterinary profession.

"On the following day two papers were given, one on 'Duties of a Whole-time County Veterinary Officer,' by Captain R. Simpson, Carlisle, and the other on 'The Supervision and Control of Milk-producing Animals and what it means to the Public,' by Captain F. W. Medlock, Kingston. Mr. Hugh Begg, of Lanarkshire, and Captain Burndred, of Blackburn, opened these papers. The two papers were so very similar in nature that, though unintentionally, they were both discussed at the same time. Many Medical Officers of Health took part in the discussions and arguments were put up both for and against the pasteurisation of milk as opposed to the production of tubercle-free milk. The feeling of the meeting, I think, was that pasteurisation is certainly a great help, but is not entirely a safe procedure as far as the elimination of tuberculosis in milk is concerned. Again at this meeting tributes were paid to the part which both whole-time and part-time County Veterinary Officers were playing in the maintenance of healthy animals and the production of pure milk.

"I would again emphasise the importance of the Veterinary Section of the Royal Sanitary Institute. I have represented this section for three years at the Annual Congress and I always leave feeling that the relationship between meat inspectors, sanitary officials and the veterinary profession is greatly strengthened by the giving of papers and the free discussion and exchange of ideas among the various delegates."

Papers.—Two short papers were read and discussed. Mr. Arnold Spicer read a short paper on "Sewage Poisoning." It was decided to withhold publication of this paper meantime, in view of an offer by Mr. J. B. Dier to read a full paper on the subject at a meeting in the near future.

Major T. Dalling read a short paper on "Diseases of the Fox Reared in Captivity." Numerous members discussed this paper and Major Dalling replied to the various questions raised.

A vote of thanks, proposed by Mr. A. D. McEwen, was accorded the essayists.

Annual Meeting and Dinner.—After some discussion it was decided, on the motion of Mr. J. B. Dier, seconded by Mr. A. T. Crowther, that the Annual Meeting be held at Tunbridge Wells and that the meeting should be followed by a dinner, the arrangements for which were left to the President and Hon. Secretary. It was also decided to extend an invitation to Professor J. Macqueen to read a paper at the Annual Meeting.

The members and visitors were the guests of the Division at tea and an hour of informal talk brought the meeting to a conclusion.

T. Dalling, *Hon. Secretary.*

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LANCASHIRE VETERINARY MEDICAL ASSOCIATION*

OFFICERS ELECTED AT LIVERPOOL

A General Meeting of the Lancashire Division, N.V.M.A., was held at the premises of The Liverpool Animal Slaughtering Co., Ltd., Carruthers Street, Liverpool, on Friday, January 21st, 1933.

The Chair was occupied by the President, Mr. J. Spruell, other members present being Messrs. A. W. Noel Pillers, G. H. Locke, J. White, A. H. Leyland, H. Sumner, Junr.; T. A. Ball, C. T. Trevers, H. R. Hewetson, E. J. Burndred, R. Hopps, H. T. Matthews, C. F. Shawcross, J. Holroyd, W. Woods, and H. Burndred. Visitors present were Messrs. J. C. Dyson and P. L. Greenhalgh.

Apologies for unavoidable absence were received from Messrs. A. L. Mullen, E. H. Curbishley, R. C. Locke, H. S. Caldwell, J. Adamson, Junr.; J. H. Wright, J. O. Powley, W. C. Burndred, H. G. Hewetson, H. Holroyd, and R. Oddy.

As the Minutes had not been printed, being in manuscript form, and not suitable for pasting in the Minute Book, the Acting Hon. Secretary gave a brief resumé of the proceedings at the last meeting at Manchester, on Friday, December 16th, 1932.

Correspondence.—Correspondence was read from Mr. C. F. Shawcross, the matter being referred to Council. A letter from the N.V.M.A., asking for the appointment of a Divisional Representative of the *Veterinary Record* was read and it was decided to appoint the Hon. Secretary, the N.V.M.A. to be informed accordingly.

Royal Sanitary Institute Congress.—It was decided that the President or his representative should attend the 1933 Congress of the Royal Sanitary Institute, at Blackpool, and that the subscription and travelling expenses be paid by the Division.

Nominations for Membership.—Messrs. C. W. Pembrey, M.R.C.V.S., and M. H. Miller, M.R.C.V.S., of Preston, were nominated for membership by Mr. A. W. Noel Pillers.

* Received for publication, February 22nd.

ELECTION OF OFFICE-BEARERS AND COUNCIL

The following were elected for the ensuing year:—

President.—Mr. T. Wilson.

Vice-Presidents.—Mr. J. Spruell, Prof. S. H. Gaiger and Mr. H. Sumner, Junr.

Hon. Secretary.—Mr. A. L. Mullen.

Hon. Treasurer.—Mr. A. W. Noel Pillers.

Auditors.—Mr. J. H. White aind Mr. T. Dobie.

Council.—Prof. S. H. Gaiger, Messrs. E. H. Curbishley, J. O. Powley, W. G. Burndred, R. H. Oddy, G. O. Davies, H. T. Matthews, C. F. Shawcross, J. Adamson, Junr.; H. Sumner, Junr.; R. C. Locke, and A. B. Mattinson.

Representatives on Council of N.V.M.A.—Prof. S. H. Gaiger, Messrs. A. L. Mullen, J. O. Powley, T. Wilson, and W. Woods.

Scrutineers for Council Election.—Messrs. W. Woods, G. H. Locke.

The Scrutineers proposed that attendances at Council, Committee, and other meetings be recorded on voting papers, as previously suggested. This was carried unanimously.

Paper and Demonstration.—The next item on the agenda being a Demonstration and Address on "*Post-mortem* Technique in the Equine Subject," by Mr. H. Burrow, M.R.C.V.S., D.V.S.M., Birkenhead, the President called upon Mr. Burrow.

[Mr. Burrow's paper is reproduced at the commencement of this issue.—Ed., *V.R.*]

A discussion ensued, in which Messrs. Leyland, Pillers and Woods took part.

Mr. Woods proposed a hearty vote of thanks to the demonstrator, and this was seconded by Mr. J. H. White.

Mr. H. Burrow replied to the discussion, and expressed his appreciation of the vote of thanks.

The meeting expressed its sympathy with the Secretary in his indisposition.

Mr. Spruell moved, Mr. A. W. Noel Pillers seconded and it was agreed that a hearty vote of thanks be accorded the Management for their kindness in allowing the use of the premises,

The members partook of tea, and a hearty vote of thanks to the President closed the meeting.

A. L. Mullen, *Hon. Secretary.*

THE DERBY "ROYAL" SHOW

The Royal Agricultural Society of England has issued the prize schedule for the forthcoming show which takes place this year at Derby, on July 4th-8th. The total value of the prizes offered (inclusive of champion prizes, special prizes, challenge cups and medals) is £14,949, of which £3,378 represents contributions from various breed societies, and £1,943 from other sources.

It was announced at a recent meeting of the Council of the Royal Agricultural Society of England that the Duke of Devonshire, who is this year's president of the Society, had received an intimation that the King and Queen hoped to visit the show on Wednesday, July 5th.

In Parliament

Protection of Animals (Amendment) (No. 2) Bill

In the House of Commons, on March 10th, a second reading was given to the above Bill "to amend section three of the Protection of Animals Act, 1911," presented by Sir Robert Gower; supported by Major-General Sir Alfred Knox, Lieutenant-Colonel Moore, Mr. Lovat-Fraser, Captain Erskine-Bolst, Mr. David Grenfell, Sir Cooper Rawson, Sir George Jones, and Mr. Harbord.

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The following questions and answers were recorded in the House of Commons recently:—

Dogs (Distemper Inoculation)

Mr. H. Williams asked the Lord President of the Council what steps are being taken to give publicity to the successful inoculation treatment for the prevention of distemper in dogs which has been discovered as the result of the investigations of the Medical Research Council?

Mr. Baldwin: A statement signed by the Duke of Portland and other members of the "Field" Distemper Council which supported the researches has been very widely published in the Press, and I am advised that full accounts of the work and its results have been communicated to the veterinary profession through the medium of the technical journals. The preparations used are now available commercially and are advertised.

Mr. Williams: Would not this research work have been impossible if the Dogs Protection Bill had been passed into law?

Mr. Baldwin: I believe it would have been quite impossible.

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Horses (Supply)

Lieutenant-Colonel Moore asked the Minister of Agriculture whether he has any information to show whether the present supply of draught horses in this country will prove sufficient to meet the demand necessitated by the revival of arable agriculture; and whether he is satisfied that the present schemes of State encouragement for heavy horse-breeding in this country are adequate for their purpose?

Major Elliot: As regards the first part of my hon. and gallant Friend's question, I have no reason to suppose that the supply of horses for agricultural purposes is likely to prove inadequate. The answer to the second part is in the affirmative.

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Performing Animals

Mr. D. Grenfell asked the Home Secretary whether he will consider introducing legislation on the lines of the Performing Animals (Regulation) Amendment Bill which passed, in all its stages, in another place in March, 1930?

Sir J. Gilmour: I can hold out no hope of legislation on this subject at the present time.

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Milch Cattle Diseases

Sir Gifford Fox asked the Prime Minister by what approximate date the committee which is examining the question of disease among milch cattle will issue its report?

The Prime Minister: The committee are still engaged in taking oral evidence, and in view of the large number of difficult questions embraced in their terms of reference and the important interests likely to be affected by their recommendations, I do not anticipate that they will be in a position to submit their report for some time.

Notes and News

The Editor will be glad to receive items of professional interest for inclusion in these columns.

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DIARY OF EVENTS

Mar. 20th.—Meeting of the Editorial Committee, N.V.M.A., at 2, Verulam Buildings, Gray's Inn, W.C.1, at 4.30 p.m.

Mar. 22nd.—Meeting of the Comparative Medicine Section of the Royal Society of Medicine, 1, Wimpole Street.

Mar. 24th. — Complimentary Dinner to Sir Frederick Hobday, Mayfair Hotel, W.

Mar. 28th.—Meeting of the North Midland Division, N.V.M.A., at Sheffield.

March 29th.—Annual General Meeting of the Scottish Society of Veterinary Inspectors, at Glasgow.

Mar. 31st.—Annual Meeting of the Southern Counties Division, N.V.M.A., at Southampton.

April 1st.—R.C.V.S. Annual Fees due.

April 5th.—R.C.V.S. Committee Meetings.

April 5th.—Meeting of the Central Division, N.V.M.A., at 10, Red Lion Square, W.C.1.

April 6th.—**R.C.V.S. Annual Dinner,** Hotel Victoria, Northumberland Avenue, W.C.2, at 7.30 p.m. Tickets price 12s. 6d.

April 6th.—R.C.V.S. Committee Meetings.

April 7th.—R.C.V.S. Council and Committee Meetings.

Sept. 18th-23rd.—N.V.M.A. Congress, Llandudno.

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DUBLIN COLLEGE PRIZE DISTRIBUTION

At the Veterinary College of Ireland, Ballsbridge, Dublin, on Tuesday, March 7th, the Principal, Professor J. F. Craig, M.A., M.R.C.V.S., announced the awards and prizes for the session 1931-32, and presented the medals to the successful students.

Awards on Results of Professional Examinations

First Fitzwygram Prize of £57 16s. awarded to the student who obtained the highest aggregate of marks in all the professional examinations of the curriculum. Students of all the Veterinary Colleges in Great Britain and Ireland are eligible. This prize was awarded in October, 1932, to Mr. R. R. Pierse, M.R.C.V.S.

Williams Memorial Prize, value £9, awarded in January, 1933, to Mr. R. R. Pierse, M.R.C.V.S.

As with the Fitzwygram Prize, all students in the various Veterinary Colleges in Great Britain and Ireland are eligible. The prize is granted to the student who passes the best final examination of the year in the subjects of Veterinary Medicine and Veterinary Surgery, provided that second-class honours or 60 per cent. of the possible marks is obtained.

Mr. Pierse was successful in gaining first-class honours at the July examination, an unprecedented distinction at this College and a notable achievement.

Class Prizes for Session 1931-32

Class A.—Bursary—Martin J. Bryne.

Biology.—Silver Medal, H. N. Spears; Bronze Medal, M. J. Byrne.

Chemistry.—Bronze Medal, M. J. Byrne.

Anatomy.—Silver Medal, M. J. Byrne; Bronze Medal, H. N. Spears.

Class B.—Senior Anatomy—Silver Medal, C. E. Magnier; Bronze Medal, J. R. Sheehy.

Physiology.—Silver Medal, C. E. Magnier; Bronze Medal, Miss D. Taylor.

Animal Husbandry.—Silver Medal, C. E. Magnier; Bronze Medal, J. R. Sheehy.

Histology.—Bronze Medal, C. E. Magnier and J. R. Sheehy tied.

Class C.—Pathology—Bronze Medal, A. D. Seton.

Materia Medica.—Bronze Medal.—C. M. Peatt.

Veterinary Hygiene.—Bronze Medal, J. S. Sweeney.

Mettam Memorial Medal for Pathology.—A. D. Seton.

Class D.—Veterinary Medicine—Silver Medal, R. R. Pierse.

Veterinary Surgery.—Silver Medal, R. R. Pierse.

Obstetrics. Bronze Medal, R. R. Pierse.

Clinique.—Silver Medal, R. R. Pierse.

Meat Inspection.—Bronze Medal, R. R. Pierse.

Veterinary Medical Association Medal for best final examination.—R. R. Pierse.

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GLASGOW VETERINARY COLLEGE

At a recent meeting of the governors of the Glasgow Veterinary College, Mr. Alexander Murdoch, C.A., was appointed chairman of the Board of Governors, and Mr. Hugh Begg, F.R.C.V.S., was appointed vice-chairman.

Mr. Murdoch, who succeeds the late Professor John Glaister, is a man of many activities. In addition to being a prominent Chartered Accountant in Glasgow, and a member of the Jute Trade Board, he is a successful breeder of Clydesdale horses at his farm, East Hallside, Newton, and at present he is chairman of the Highland and Agricultural Society of Scotland.

Mr. Begg is the Chief Veterinary Officer for the County of Lanark. He has always been a stout supporter of the College, from which he graduated in 1887.

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NEWCASTLE DISPENSARY: A BROADCAST APPEAL

An appeal on behalf of the Animals' Dispensary, Newcastle-on-Tyne, which is carried on conjointly by the North of England Division, N.V.M.A., and the local branch of the R.S.P.C.A., was broadcast by Sir Arthur Lambert, from the Newcastle (5NO) Station, on the evening of February 19th.

The institution was opened in November, 1928, by Lady Lambert, and Sir Arthur emphasised the "utter inadequacy" of the premises to cope with the increased calls on its services.

"Since 1928," said Sir Arthur, "no less than 10,000 attendances have been put in, the patients including dogs, cats, birds, hawkers' ponies, and occasonally tortoises and rabbits—all the property of genuinely poor people. Nevertheless a voluntary contribution box seldom fails to receive the widow's mite and the poor man's copper."

Sir Arthur described the small surgery now in use at 19, Vine Lane, Newcastle. The premises formerly consisted of an old larder and a coal-house.

We are informed by Mr. H. S. Elphick that the amount received in response to the appeal was £43 15s. 3d., and that the money thus raised is earmarked towards either the purchase of other premises of a more suitable nature, or purchase and alteration of the existing premises in Vine Lane.

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VICTORIA VETERINARY BENEVOLENT FUND

A very successful Whist Drive in aid of the Victoria Veterinary Benevolent Fund was held at at Bonne Bouche Restaurant, in Dublin, on Wednesday evening, February 1st. The function was organised by Mrs. J. F. Craig, and the success of the evening was greatly helped by Mrs. R. H. Lambert, Mrs. J. J. O'Connor, Mrs. T. M. Browne, and Miss Norris, who undertook to sell tickets. Prizes were generously provided by Messrs. Allen Baker, R. B. Freeman, H. O'Leary, and P. J. Howard. During the evening two raffles were also held. As a result, the Victoria Veterinary Benevolent Fund benefits by the handsome donation of £12 10s. 9d. The thanks of the Council and all those interested in the Fund are due to Mrs. Craig, and her co-workers for this very practical way of helping a deserving Fund.

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R.C.V.S. OBITUARY

Booth, Frank, Senior, Ty Gwyn, Old Colwyn, North Wales. Graduated N. Edinburgh, May 30th, 1889; died March 14th, 1933. Aged 66 years.

The Late Mr. W. M. Lyon

The *Berwick Journal* states that, in the death of Mr. W. M. Lyon, M.R.C.V.S., which was recorded in our last issue, Wooler and district have lost one of the most useful members of the community. Owing to failing health, Mr. Lyon made over his extensive practice some months ago, to has nephew, Mr. H. Bain, M.R.C.V.S., Berwick. Deceased was an Ayrshire man, and commenced practice in Wooler some 50 years ago. He was a member of the North of England Veterinary Medical Association; a member of the old Board of Guardians, and was one of the original members of Glendale Rural District Council.

In addition to Mr. Hugh Bain, the profession was represented at the interment by Mr. W. A. Doughty, M.R.C.V.S., Alnwick.

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PERSONAL

North of England Division Stalwarts

Presentation to Captain J. R. Rider.—At the Annual Meeting of the North of England Division, N.V.M.A., which was held at Armstrong College, Newcastle-on-Tyne, on March 11th, and a report of which will appear in a later issue, the newly-elected President, Mr. H. S. Elphick, on behalf of the members, handed over to the Hon. Secretary, Mr. J. R. Rider, of Darlington, a beautiful electric decorative lamp, as a token of regard for him and for Mrs. Rider, and in appreciation of Mr. Rider's services, not only as Secretary of the Division, but as their Representative on the Council of the National Veterinary Medical Association.

The New President.—In reference to Mr. Elphick's election to the presidency of the North of England V.M.A., the *Newcastle Journal*, of March 13th, recalls that 24 years ago Mr. Elphick occupied a similar position, and continues "The name of Elphick is an honoured one in the profession in the North-Eastern area. The firm has been in existence over a hundred years. It is 34 years since Mr. H. S. Elphick qualified to practice, and among other activities he has gained prominence for the zealous self-sacrificing work he has performed in an honorary capacity in connection with the Animal Dispensary in Newcastle. During the war Mr. Elphick served in the R.A.V.C., attaining the rank of captain. He is indefatigable in upholding the rights and privileges of the veterinary profession."

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STUD FARM PROFITS: LORD GLANELY WINS APPEAL

The House of Lords on Tuesday, gave judgment in an appeal of great importance to owners of stallions and brood mares.

Lord Glanely appealed against certain assessments made on him in respect of profits derived from fees paid for the services of his stallions. He contended that the profits from the stud farm operations arose from the occupation of those lands and that the income-tax paid under Schedule B covered any profit from the service fees.

The Crown contended that the profits were assessable under Schedule D as arising from a trade or concern in the nature of trade and not from the occupation of land.

The House of Lords held that the use of the stallions on the farm could not be taxed under Schedule D as it did not constitute something distinct and separable from the purpose of the occupation, and they allowed the appeal.

Lord Glanely has been prosecuting this case for 10 years, and nothing would deter him from taking it as far as any law case can be taken—to the House of Lords. Owners of stallions before have tested the matter legally, but have given in before reaching the last stage. Financially the breeding of thoroughbreds is immensely improved by the success of Lord Glanely's action, to whom racing and breeding owe a really great debt.

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BRITISH MEDICAL ASSOCIATION ANNUAL MEETING

The one hundred and first annual meeting of the British Medical Association will be held in Dublin, from July 21st to 29th, 1933.

The Annual Representative Meeting will begin at the Royal Dublin Society Hall, on Friday, July 21st, and be continued on the following three week-days, and the statutory Annual General Meeting will be held at the Royal Dublin Society Hall, on Tuesday, July 25th, at 12.45 p.m. The in-coming President, Professor Moorhead, will deliver his address at the adjourned meeting at the same place at 4.30 p.m.

The Annual Dinner of the Association will take place at the Gresham Hotel, on Thursday, July 27th, at 7.30 p.m., and the Popular Lecture will be given at the Royal Dublin Society Hall, by Professor R. A. S. Macalister, on Friday, July 28th, at 8 p.m.

The Pathological Museum in Trinity College will be opened on Tuesday, July 25th, at 11 a.m., and will remain open on the three following days from 9 a.m. while the Annual Exhibition of Surgical Appliances, Foods, Drugs and Books will be held in the Round Room, Mansion House.

The clinical and scientific work will be divided among 16 Sections, meeting on Wednesday, Thursday, and Friday, July 26th, 27th and 28th.

The local Honorary General Secretaries of the meeting are Dr. J. P. Shanley and Professor J. W. Bigger, B.M.A. Meeting, Royal College of Physicians, Kildare Street, Dublin.

ARMY VETERINARY SERVICE

Indian Appointment

Lieutenant-Colonel Harold J. Holness, D.S.O., R.A.V.C., is appointed Deputy Director of Veterinary Services, Southern Command.

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London Gazette — War Office — Territorial Army Reserve of Officers

February 28th.—Major and Bt. Lt.-Col. A. F. Castle, F.R.C.V.S., from Active List, to be Major and Bt. Lt.-Col. (March 1st); Capt. W. H. Wortley, from Active List, to be Capt. (March 1st).

March 3rd.—Lt.-Col. E. M. Perry, C.B.E., T.D., F.R.C.V.S., having attained the age limit retires and retains his rank with permission to wear the prescribed uniform (March 4).

Territorial Army.

March 10th.—Major A. C. Duncan, T.D., F.R.C.V.S,. having attained the age limit retires, and retains his rank, with permission to wear the prescribed uniform (March 11th).

Regular Army

March 14th.—Major W. D. Connochie retires, receiving a gratuity (March 15th.)

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TUBERCULOUS MEAT: SEQUEL TO PARTIAL CONDEMNATION

The *Meat Trades Journal,* of March 2nd, reports that a furore was caused at a meeting of the West Dean Rural District Council as a result of an article which recently appeared in that periodical dealing with a discussion by the West Dean Authority with regard to meat affected with tuberculosis. The opinion held by this authority was that wherever the presence of tuberculosis was found the whole carcass should be destroyed and not merely those parts affected, which was stated to be the general principle. Following the article which appeared in the *Journal* the matter was taken up by the Sanitary Inspectors' Association, and the Council gave consideration to a long communication dealing with several points in connection with their discussion.

It was stated that it was the practice of a neighbouring authority to call in a veterinary surgeon in the event of doubt or dispute arising, and a member recommended a similar practice being adopted by West Dean Council.

In their letter to the West Dean Council the Sanitary Inspectors' Association stated that they gathered that the Medical Officer of Health, supported by veterinary opinion, disagreed with the course taken by the Inspector, Mr. Davies, and expressed the view that the whole of both carcasses should have been condemned. It was evident, however, from the particulars given, that the disease could not be regarded as "generalised" tuberculosis necessitating the condemnation of the whole carcasses.

The letter then stated that when all diseased portions had been removed, in accordance with the instructions, the remainder of the carcass should be passed as fit for human consumption. It was further explained that if disease was found in any part of a carcass, or in any organ, the whole carcass and the organs should be examined for any evidence of any repetition of the local condition.

Quoting from the Ministry's Memorandum No. 282, of March 16th, 1922, the following extract (stated the letter) appears:—

"The Minister understands that this code has been framed in accordance with the general principles laid down by the Royal Commission with the exception that the Committee did not think that the presence of a small amount of tuberculosis deposit in a pig should necessarily involve the condemnation of the whole carcass."

The Association was therefore of the opinion that the Inspector acted in a proper manner in passing the remainder of the carcasses as being fit for human consumption, and entirely supported him in the course taken. If the Council did not agree with the Inspector, and considered that the whole of the carcasses in such circumstances should be condemned, it was respectfully suggested they should pass a resolution embodying such views, so that the Inspector might be safeguarded in future against any action which might be taken by butchers and others in deviating from the explicit recommendations of the Ministry of Health contained in the memorandum referred to. It was confidently hoped, however, that the Council would fully endorse the action, and exonerate Mr. Davies from all blame in connection with the matter.

The Council concurred as to Mr. Davies' ability to justify his action as far as his position was concerned, but felt that the whole of the carcass should be destroyed if parts were found to be affected with tuberculosis.

The Chairman said that there were three Course open to the Council. The first was to leave the whole matter to the discretion of the inspector; (2) to condemn the whole carcass; (3) for the M.O.H. and Inspector to call in a veterinary surgeon in case of dispute.

It was then moved "That the M.O.H and Inspector shall be empowered to call in the services of a veterinary surgeon if and when they deem it necessary."

This proposal was seconded.

As an amendment it was moved "That the whole of the carcass in future be condemned whenever tuberculosis is present."

The amendment was lost, and the motion carried.

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FOOT-AND-MOUTH DISEASE

Salutary Penalty for Failure to Report

An important case brought by the Ministry of Agriculture following the recent outbreak of foot-and-mouth disease in North Lincolnshire was heard by the Caistor Bench, on March 8th, and resulted in Arthur Borrill, of The Grange, Keelby, being fined £20 for failing to give notification of the existence of foot-and-mouth disease on his farm at the end of December, 1932.

His shepherd, Joseph Mumby, was fined £1 for being the person in charge of the sheep and failing to report.

Mr. B. Pearlman (Hull) appeared for the defendants, and pleaded not guilty. The Ministry was represented by Mr. H. J. Kemp, (London).

Emphasis was laid on what was described as the extraordinary importance of this case in showing to farmers what their duties were in any case of suspicious illness among sheep.

It was disclosed that the case concerning Borrill had been reported to the Lindsey County Council, but they had declined to take proceedings, which had, therefore, to be instituted at the instance of the the Ministry. Mr. Kemp said that their evidence if proved, would rather reflect on the County Council.

Three officers of the Ministry gave evidence as to the condition of the sheep, and it was stated that it should not be difficult for an ordinary farmer to distinguish between foot-and-mouth disease and foot rot.

Defendant said he had altogether 1,500 acres, and was familiar with the details of the care and management of sheep. Lameness among the sheep was reported to him, but the symptoms were those of foot rot, and not those of foot-and-mouth disease. For this reason he did not report the matter.

A number of people were called for the defence, including Mr. J. H. Nettleship, who spoke of the prevalence of foot rot in North Lincolnshire.

Mr. Pearlman contended that there was a lack of bacteriological evidence in support of the case, but the chairman (Mr. E. Smith) said the Bench were satisfied that the case had been proved.

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MUSK RATS BANNED

The Minister of Agriculture and Fisheries and the Secretary of State for Scotland have issued an order prohibiting absolutely the importation into, and keeping within Great Britain, of musk rats. This order has been laid before Parliament, in accordance with the provisions of the Destructive Imported Animals Act, 1932, and will, unless Parliament resolves to the contrary, come into force on April 1st, 1933.

Regulations made immediately after the passing of the Act allowed the keeping of musk rats under licence in pens of approved design and subject to stringent conditions. In view, however, of the risk of escape, which, owing to the human element, no licence conditions can completely eliminate, and of the danger caused by these animals when at liberty, it has been considered necessary, in the public interest, to prohibit entirely the keeping of musk rats in this country.

As from the date when the order comes into force, any person who imports or attempts to import any musk rat into, or keeps any musk rat in, Great Britain, will be liable on conviction to a penalty of £20.

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NATIONAL PONY SOCIETY .

The annual report presented to the annual general meeting of the National Pony Society, on March 3rd, showed that the membership had decreased slightly, owing to the difficult times. The incoming president is Sir Ian Walker, and the president-elect for 1934 is the Marquess of Cholmondeley.

Reference was made to the difficulty of maintaining native breeds of ponies consequent on the withdrawal of Government support. It was suggested that the Ministry of Agriculture should be approached with the object of getting something done on behalf of native pony breeding, and the matter was referred to the council for consideration.

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LONDON UNIVERSITY B.Sc. (SPECIAL) DEGREE IN PHYSIOLOGY

The *London University Gazette* reports that at a recent meeting of the Senate, the Regulations for the B.Sc. (Special) Degree in Physiology for Internal Students were amended by the substitution of the following for the third paragraph on p. 291 of the Red Book, 1932-33:—"Bachelors of Science in Household and Social Science or in Veterinary Science will be permitted to enter for the B.Sc. (Special) Examination in Physiology not less than one year after obtaining the B.Sc. Degrees in Household and Social Science, or in Veterinary Science, and such candidates will be excused the subsidiary subject."

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STANDARDS IN THE MILK INDUSTRY

The last of the Sessional Meetings in London arranged by the Royal Sanitary Institute for the 1932-33 session, promises to be of exceptional interest. The meeting will be held at the Institute, 90, Buckingham Palace Road, London, S.W.1, on Wednesday, March 29th, at 5 p.m., when a discussion on "Standards in the Milk Industry: a joint responsibility of medical officers of health, producers, distributors and the veterinary services" will be opened by Lieutenant-Colonel C. Waley Cohen, C.M.G., M.A. The Chair will be taken by the Right Hon. Viscount Astor.

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An Animal-Lovers' dinner and ball has been planned on behalf of the Royal Veterinary College, to take place at the Dorchester on Wednesday, May 24th. The chairman of the committee is Lieutenant-Colonel Sir Merrik Burrell, chairman of the Governors of the Royal Veterinary College; the honorary secretary is the Hon. Elizabeth Kemeys-Tynte, and the organising secretary Mrs. Sheila Tolhurst.

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Errata.—In the West of Scotland Division Discussion on Mr. Hugh Begg, Junr.'s paper, "Conditions Associated with Parturition in the Cow," Professor Robb's reply, for "Robb" read "Begg" in line 1, para. 3, and line 5, para. 4 of column 2, page 201 of our last issue.

Correspondence

Letters to the Editor should reach the Office not later than by the first post on Tuesday morning for insertion in following Saturday's issue.

All correspondence must bear the name and address of the contributor for publication.

The Editor does not hold himself responsible for the opinions of his correspondents.

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"HOW THE VETERINARY ADVISER CAN HELP THE FARMER"*

To the Editor of the Veterinary Record.

Sir,—The report on the above from the *Kentish Gazette and Canterbury Press*, recorded in a recent issue, seems to be a clear example of the "accent of superiority" which I believe to be an accepted characteristic of officialism.

The practitioner is recognised, but whatever his virtues, apparently, in the main, he is forced "through changing customs and economic pressure to devote more and ever-increasing attention to the animals we call pets." Surely this is an exceedingly unfair description of the practitioner—a man who, fit or unfit, whatever the weather, has frequently hard, dirty, maybe foul work to do, which nobody desires and which he can only properly do by the recognition that it is for the animal and not for the owner from whom he may never receive his inadequate remuneration. I wish some of these Advisory Officers had this work to do, and then perhaps they would show some little genuine consideration for the country practitioner.

* Owing to pressure on our space last week, publication of Mr. Hogben's letter was unavoidably postponed.—Ed., *V.R.*

The ideal scheme is interesting; it seems to be of an institute to which practitioners and others bring their tasks presumably for correction, criticism or even a benison. It is certainly a grandiose scheme. "Pack up all your troubles in your old kit bag" and pack it off to Wye.

In the second speech the accent of superiority develops into blatant criticism of the mental capacity of the practitioner which I do not believe to be true. If Veterinary Advisory Officers desire assistance from the practitioner surely they should be willing to give assistance to him. Apparently their desire is to get into the "field" and do their own work themselves, acting quite independently of and without the assistance of the practitioner, but preferably, so far as I can judge, with the assistance of the owner.

Yours faithfully,

Hugh P. Hogben.

Folkestone.

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To the Editor of the Veterinary Record

Sir,—As West of Kent veterinary practitioners, we find ourselves in complete agreement with Major Dunkin's letter to the *Veterinary Record* of March 4th.

We have at all times received such great help and advice from the various research institutes (particularly The National Institute for Medical Research, Mill Hill; The Research Institute of the Royal Veterinary College, London; The Wellcome Research Institute, Beckenham; The Institute of Animal Pathology, Cambridge), that we feel it would be lacking on our part if we should give the impression (by abstaining from comment on the subject) that these Institutes had not given, at all times, all that could possibly be required by country practitioners in their work for the agriculturists in this county.

Yours faithfully,

L. P. Pugh.
J. W. Bruford.

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To the Editor of the Veterinary Record

Sir,—In view of your Editorial footnote to my letter under the above heading in the current issue, in which you demur to my use of the words "tolerating it," may I be allowed a word in defence or explanation of the expression. The words are applied in my letter, purely and solely, to the apparent failure of our two governing bodies to prohibit or prevent the present procedure which enables an Advisory Officer to enter into direct professional contact with the clients of practitioners within his area, in a manner which no general practitioner can adopt in relation to his brother chip, without being liable to be called to serious account. The Council of the Royal College is the author and the guardian of our ethical code, with its Registration Committee as the Judicial Tribunal, whilst the National Veterinary Medical Association can, I assume, be regarded as the "Watchdog" of the professional honour and interests of all of us. If therefore the procedure in question is, as I maintain, and as seems to be admitted, a breach of professional conduct, then it is the duty and privilege of both these bodies to enforce obedience, and punish disobedience, and failure to do so is, I submit with great respect, "tolerating it."

If not, are we to conclude that, after all, the two bodies which have for so long been regarded as the sole arbiters of our conduct as professional men, are not masters in their own house, but *have* to submit, as they *have* done, to the dictation of the Ministry of Agriculture, and accept one code for general practitioners, and a very different one for Advisory Officers?

Many of the former would like to know.

Yours faithfully,

Edward P. Edwards.

Queen Hotel, (Mold, North Wales.)
Bournemouth.
March 12th, 1933.

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VETERINARY INSPECTION SERVICE

To the Editor of the Veterinary Record.

Sir,—I find myself in such cordial agreement with the greater part of Dr. Tom Hare's letter in your issue of March 11th, that it is with some diffidence that I come forward with a little questioning criticism of certain of his statements and conclusions.

"*Efficiency is a quality of the individual and not dependent on his station.*" That may possibly be right, but there is reason to think that a man's station may depend on his efficiency, and some relationship between the two is frequently apparent, even in this imperfect world.

"*Can it be reasonably contended that uniformity in outlook and behaviour among milk producers is obtainable or even desirable?*" Certainly there may be different methods of reaching the desired end, but I take it that, in regard to milk, the aim is to ensure a uniformly safe supply. I would turn the question and ask "Can it be seriously contended that the outlook and behaviour of every milk producer is correct or even desirable?"

"*A scheme of veterinary inspection will succeed not because it is logical, not because it is administratively convenient, but because it suits the producer.*" There is a little trouble connected with the use of collective nouns. One is prepared to grant attributes to a class which one must perforce deny to individuals of that class. If the scheme is to suit the producer and his "sturdy individualism," then the tact of the veterinary inspector, on which Dr. Hare lays emphasis, may be in danger of passing over the narrow crest which divides it from the steep slope into subservience. In spite of his tilt at uniformity, Dr. Hare may concede that some producers, and some veterinarians too, will have to be made to come into line. I agree that the producer must be sympathetically considered, but the interests of the community as a whole must be put in front of those of any section. If we put expediency first and the interests of the community second, we are not on the soundest foundation for a lasting edifice.

I hope that Dr. Hare will not misunderstand my object, which is essentially the same as his. It is only by discussion that we can arrive at that considered verdict which is so much to be desired. I recommend any of your readers who may have missed Dr. Hare's letter to repair the omission without delay.

Yours faithfully,

Esmond Brown.

92, Spottiswoode Street,
Edinburgh.
March 13th, 1933.

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LETHAL CHAMBERS

To the Editor of the Veterinary Record.

Sir,—Like many others who have recently contributed to the correspondence columns of the *Record* on the above subject, I have long appreciated the shortcomings of the usual methods of destroying small animals and it was with interest

that I read some time ago of the introduction of the electrolethaler for the humane slaughter of swine. Realising that this form of lethalising offered possibilities hitherto unobtainable, I decided to give it a trial and have been using it for the destruction of both dogs and cats with most gratifying results. The animals do not resent the application of the instrument, neither do they seem to appreciate that anything out of the ordinary is about to happen. Loss of consciousness is produced instantaneously and after the electrolethaler has been applied for 10 seconds it is removed and a lethal (intrathoracic) injection of prussic acid administered. It appears that there are some who somewhat doubt the eflicacy of an electrical appliance for the destruction of animals, but I can assure them that it is far superior in every way to any of the other methods suggested, and shall be pleased to demonstrate it to anyone interested. The only drawback to the electrolethaler is that it cannot be used where electricity is not installed and in such cases it is often difficult to know which lethalising agent to adopt. Undoubtedly a bullet, if correctly placed, supersedes such methods as prussic acid, but like other old-fashioned forms of destruction there are objections to its use, all of which have been adequately dealt with in previous correspondence in the *Reçord.*

I should be glad to hear of anyone who has successfully used some of the more recently introduced lethalising agents such as "Pernocton," as I feel it is time that we dispensed with the older methods of destruction entailing the use of lethal chambers, morphia, chloroform, prussic acid, etc. It is also time that the destruction of animals should be entrusted to qualified veterinary surgeons only; and now that the scheme for the free treatment of poor persons' animals is in operation it seems to me that if the above scheme were more widely advertised this would soon become an accomplished fact. I am quite sure that any veterinary surgeon would sooner destroy a poor person's animal for nothing than that it should be done to death by some person unqualified to do so, and if this were made more generally known it would do much to lessen the number of cases of atrocious cruelty associated with the destruction of dogs and cats which have received so much publicity in the Press during recent months.

Yours faithfully,

Cyril R. Golledge.

Staddlecote,
Trowbridge, Wilts.
March 14th, 1933.

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To the Editor of the Veterinary Record.

Sir,—I have read with interest and bewilderment the correspondence concerning the painless destruction of dogs and cats. From the contents of the letters in the *Veterinary Record* one would think we were trying to patent a method for the wholesale destruction of our unwanted pets or patients. May be we are searching for a method that can be adopted by any Tom, Dick or Harry to destroy these animals. Is it that we are looking on the financial side and want a cheap method of destruction, or is it that veterinary surgeons do not want the odious task, and wish to turn such jobs over to the layman ? I do not think veterinary surgeons get so many animals to destroy that such wholesale methods are warranted.

In the case of the dog (criticism has not involved the cat to any great extent) what is wrong with a large dose of morphia followed by chloroform ? One has the satisfaction of knowing that it was a painless death.

C. Formston.

Snaighton, Cheshire.

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THE CAMEL

To the Editor of the Veterinary Record.

Sir,—I have prepared a short supplement to bring my "Treatise on the One-humped Camel" up-to-date, and have designed it so that it can be fixed in the back cover of the book. I shall be glad to supply a copy free to any M.R.C.V.S. who has purchased the book, if he will kindly send the postage. The Supplement will be price 3d., post free to Institutions or non-members.

Yours faithfully,

A. S. Leese.

White House,
Pewley Hill, Guildford.
March 7th, 1933.

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WHAT IS THIS SO-CALLED SEWAGE POISONING IN CATTLE ?

To the Editor of the Veterinary Record.

Sir,—*Re* the letter published under the above heading in the last edition of the *Veterinary Record,* I am writing to draw your attention to the fact that at the present moment there is a Law case, in which "so-called sewage poisoning" is the chief factor, waiting to come before the Court of Appeal, and in my humble opinion it would be far better to refrain from any public discussion on this subject until this appeal has been heard.*

Yours faithfully,

R. J. Stow.

137, Brighton Road,
Redhill.
March 8th, 1933.

[*Arrangements have been made to secure a transcript of the evidence in this case as soon as the appeal has been heard.—Ed., *V.R.*]

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THE SIR F. HOBDAY DINNER

To the Editor of the Veterinary Record.

Sir,—I do not understand the object of Mr. Eaton Jones' letter in your issue of March 11th. Mr. Eaton Jones is in the fortunate position of having ample leisure to gratify his sporting instincts. Most veterinary surgeons are not in this delectable position but, as evinced by the number of applications to attend Sir Frederick Hobday's complimentary dinner, they are not wanting in their desire to pay their respects and show their esteem and affection for a man who has brought honour, not only to himself but to the whole profession.

I would like to add that the date now fixed was not the original one chosen, but that the change was made in response to many requests.

Yours faithfully,

J. McCunn.

Royal Veterinary College,
Camden Town, N.W.1.
March 13th, 1933.

The Editor acknowledges, with thanks, the receipt of the following:—

Reports of meetings of the Eastern Counties, the Mid-West and South Wales, and Dumfries and Galloway Divisions, N.V.M.A., from Mr. H. P. Standley, Junr., Mr. C. E. Perry, and Mr. Francis A. Davidson, respective Hon. Secretaries.

Communications from Dr. T. W. M. Cameron (Macdonald College, Canada), and Mr. C. S. M. Hopkirk (Wallaceville, New Zealand).